

KEY FEATURES

- **Reliable white seeded alternative to Kaska in low rainfall mallee environments.**
- **Early flowering and maturing, and suitable for crop-topping.**
- **Semi-dwarf and semi-leafless type with vigorous early growth, similar to Kaska.**
- **Resistant to pod shattering at maturity.**
- **Resistant to downy mildew.**
- **Good harvest-ability with large white grain suitable to feed and niche split pea markets**

Breeding and Development

Bundi[®] (89-036-9-8) was developed by the Australian Coordinated Field Pea Improvement Program and commercialised in 2006. It was bred at VicDPI, Horsham and is a sister line of the variety Kaska. Bundi was selected for its improved yield potential in lower rainfall environments, resistance to downy mildew, resistance to pod shattering at maturity, lodging resistance at maturity and white spherical, large grain with excellent splitting efficiency.

Characteristics

Bundi[®] is a vigorous growing, semi-dwarf, semi-leafless, pod shatter resistant field pea similar to Kaska. Bundi flowers and matures up to 2 weeks earlier relative to Parafield and Kaska (similar to Snowpeak). At maturity Bundi shows good harvest-ability (similar to Kaska) and pods are resistant to shattering. Bundi has excellent resistance to downy mildew, but is susceptible to black spot and powdery mildew like Kaska and Parafield. It produces uniform large sized white grain suitable for stockfeed or split pea markets.



Agronomic features & disease resistance

	Seed Type	Leaf Type	Plant height	Relative flowering time	Maturity	Standing at maturity	Pod shatter resistance	Black Spot	Downy mildew	Powdery mildew	*Bacterial Blight (<i>P. Syringae</i> pv. <i>syringae</i>)	Relative seed size (g/100)
Bundi[®]	White	SL	M	Early	Early	Fair	R	S	R	MS	S	22
Snowpeak ⁽¹⁾	White	SL	M	Early	Early	Good	S	S	R	MS	S	22
Sturt ⁽¹⁾	White	C	T	Mid	Mid	Poor	S	S	MS	S	MR-MS	19
SW Celine ⁽¹⁾	White	SL	M	Early	Early	Good	S	S	MS-MR	S	S	22
Excell ⁽¹⁾	Blue	SL	M	Early-Mid	Mid-Late	Good	VS	S	MR	S	S	22
Parafield ⁽¹⁾	Dun	C	T	Mid-Late	Late	Poor	S	S	S	S	MR-MS	23
Kaska ⁽¹⁾	Dun	SL	M	Late	Late	Fair	R	MS-MR	MR	S	S	22

*Bacterial Blight testing is based on screening over the last 2 years for *Pseudomonas syringae* pv. *syringae* and further screening trials will continue.

Shattering: R = resistant; S = susceptible. Leaf type: C = conventional, SL = semi-leafless.

Disease ratings: R = resistant; MR = moderately resistant; MS = moderately susceptible; S = susceptible.

Yield and adaptation

Bundi[®] has shown high yield potential across a range of environments, but has shown the best relative advantage in the medium to lower rainfall southern regions, particularly in Victoria.

National Variety Trials – Long Term Yield as % of Kaska, data range: 2000 to 2007

	NSW		Vic		SA			
	South-east	South-west	Wimmera	Mallee	Lower EP	Mid North	South East	Yorke P
Bundi[®]	95 (48)	98 (21)	98 (16)	104 (26)	98 (7)	99 (19)	96 (11)	96 (11)
Snowpeak ⁽¹⁾	86 (62)	88 (30)	90 (18)	94 (30)	86 (6)	87 (18)	87 (9)	81 (8)
Sturt ⁽¹⁾	99 (59)	103 (27)	100 (18)	104 (34)	100 (11)	98 (27)	98 (17)	94 (15)
SW Celine ⁽¹⁾	103 (7)	105 (5)	102 (3)	103 (5)	103 (5)	100 (6)	100 (6)	96 (6)
Excell ⁽¹⁾	86 (32)	87 (16)	86 (19)	87 (33)	86 (8)	85 (21)	85 (12)	83 (11)
Parafield ⁽¹⁾	100 (67)	102 (31)	93 (20)	96 (35)	97 (13)	94 (29)	95 (18)	91 (14)
Kaska ⁽¹⁾ yield t/ha (100%)	2.37 (66)	1.64 (31)	1.97 (20)	1.56 (30)	2.42 (13)	2.56 (29)	3.11 (18)	2.41 (17)

Numbers in () = site years. Yield data courtesy of Aust Crop Accreditation System – National Variety Trials.

Data also courtesy of SARDI, DPI Vic, NSW DPI before 2005

Management Package

(Consult local grower guides for more detailed information)

Sowing Date and Seeding Rates

- Sowing date is similar to main season varieties such as Kaspa and Parafield.
- Target 40 – 50 plants/m² - similar to Kaspa.
Refer to [Pulse Point 20 'Germination Testing & Seed Rate Calculation'](#)
- Always request a germination test report when buying seed & test any kept seed after grading.

Herbicide Sensitivity

Crop tolerance and yield responses to herbicides are strongly influenced by seasonal conditions, and it is essential to validate herbicide effects on varieties over several seasons.

- Screening on Bundi[®] in 2004 at Wagga NSW with 8 commonly used herbicides indicated no statistically significant yield loss.
- The same trial in 2005 showed 10 % yield loss to Metribuzin (Sencor[®] 750) PSPE at 570gai/ha, and in 2003 19% yield loss was also observed, indicating some possible seasonal sensitivity to this herbicide.
- The Wagga trial in 2005 also showed 8% yield loss to Imazethapyr (Spinnaker[®] 700 WDG) PSPE at 150gai/ha, but no loss in trials conducted in 2003 & 2004.
- Bundi was evaluated for sensitivity to commonly used herbicides on calcareous grey sandy clay loams at Minlaton, SA in 2006. Bundi performed similar to Kaspa with some visual damage but only a low level of yield loss. Herbicide tolerance data is available on the NVT website www.nvtonline.com.au

Disease

- Bundi[®] is resistant to downy mildew and will not require a fungicide seed dressing in areas where the disease is a frequent occurrence. *Refer to ['Pulse Seed Treatments & Foliar Fungicides 2006'](#)*
- Bundi[®] is susceptible to powdery mildew and may require fungicide protection in high risk areas or in wet springs.
- Bundi[®] is susceptible to black spot and bacterial blight and will need to be managed to reduce the incidence of these diseases. *Refer to ['Strategies for Disease Control in Field Peas 2003'](#) & ['2006' update](#) and ['Preventing Bacterial Blight in Field Peas'](#)*

Harvest & Marketing

- A semi-leafless erect type pea with shatter resistant pods similar to Kaspa.
- Roll post-sowing, and harvest early (ie > 12% moisture) to minimise harvest difficulties, and cracking of grain. *Refer to [Pulse Point 5 'Desiccation & Harvest of Field Peas'](#)*
- Header front modifications may be required to assist flow of light bulky material into the elevators.
- Bundi[®] produces large sized white grain suitable for human consumption markets, but primarily for stockfeed as the market and demand for white peas for export or splitting domestically is small.
- Bundi[®] will likely need to be segregated from dun and blue pea types in bulk grain accumulation systems.
- Bundi[®] has a \$5.00 per tonne End Point Levy.

Seed Availability

Bundi[®] is protected under Plant Breeders Rights, and growers can only retain seed for their own use. Any unauthorised commercial propagation or any sale, conditioning, export, import or stocking of propagating material of this variety is an infringement under the PBR Act, 1994. All Bundi seed will be fumigated for pea weevil, and is certified seed.



Auswest Seeds are the marketers of the variety Bundi[®].
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Further Information on growing Bundi[®]

- I&I NSW publications: - [Winter Crop Variety Sowing Guide: Weed Control in Winter Crops: Insect and Mite Control in Field Crops: Pulse Point Series.](#) (www.dpi.nsw.gov.au)
- SARDI fact sheet "Field pea variety sowing guide 2008" (www.sardi.sa.gov.au)
- Vic DPI "Winter Crop Summary 2007" (www.dpi.vic.gov.au).
- Pulse Australia bulletins: "Field pea disease management strategy for southern and western regions 2003, (2006 update)", Pulse Tech-Note Flash "Pulse seed treatments and foliar fungicides 2008" (www.pulseaus.com.au).

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